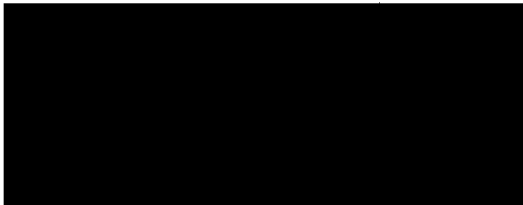



CENTRAL INTELLIGENCE AGENCY
WASHINGTON 25, D. C.

15 October 1952

 25X1A5a1

Estimation of the capacity of a given section of railroad is a problem having many important implications. It also involves many questions which can be best solved in the light of practical experience. For these reasons, I am by this letter seeking to enlist the research assistance of your industry on this problem. 25X1A5a1

25X1A5a1 I understand that the railway industry,  has numerous standing committees of specialists engaged on technical research projects. Would it be possible to have a study of factors affecting railway capacity assigned to an appropriate research group of the industry for review and report, as a contribution to the national defense? Since the study would deal with basic principles applying to all railway lines, the results might well have value also to the railroads, in application to various types of problems concerning capacity and the facilities required to meet various demands. Such a study of basic principles also would obviate security complications which might arise in studying a specified line or area.

Subject, of course, to any suggestions you might wish to offer, the procedure envisaged would be to set up estimated maximum capacity for a given length of straight, level double track, disregarding terminals. Then introduce, item by item, various limiting factors, such as grades, curves, weather, terminals, etc., and assisting factors such as automatic signals, CTC, radio communication, and so on, measuring the effect of each upon capacity. As many as possible of these influencing factors might be expressed in curves, so that their effect for any actual line situation could be estimated by reading from the curve. The same would be done for single track. Such a study could be progressed to any degree of refinement, in the light of available time and personnel.

The results of such a study would be a series of findings or formulae on the effects of all principal factors entering into railway capacity. These results could then be cumulatively applied to corresponding conditions

on whatever rail line might be under study. What is here sought, let me emphasize, is a general method of approach to the problem of estimating railway capacity and not an estimate of capacity for any particular line of railroad.

If you think it would be feasible to have such a study undertaken by an industry research group, I should be glad to have [REDACTED] confer at any time with whomever you might nominate, to work out necessary details and keep in touch with developments.

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Let me add the assurance that your assistance along this line would be a real service to the country, in my opinion, and also a much appreciated favor.

Yours very truly,

Robert Amory, Jr.
Assistant Director